

Java mapping for pragmatic programmers



October 8, 2013

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Scala Edition

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Disclaimer

Disclaimer

- I'm not a Scala expert, actually, I do not know Scala at all.

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- Lets discuss today not implementations, but ideas staying behind them.

Agenda

1. Parser combinators
2. JAXB plugin
3. Scala Macros
4. Q&A, Discussion

XRools

- Written by Scala experts from Kiev
- XPath like DSL
- Extendable by Scala code
- XML oriented

XRools

Talk is cheap. Show me the code.

XRoos Pros

- Scala

XRoos Pros

- Scala
- Non-developers write rules

XRoos Pros

- Scala
- Non-developers write rules
- Dashboard

XRoos Cons

- Scala

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XRoos Cons

- Scala
- Non-developers write rules
- No compile-time checks

XRoles Cons

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- Non-developers write rules
- No compile-time checks
- Uses reflection
- No real IDE support
- Functions defined away from its only usage
- Debugging?

XRoles



JAXB plugin

- Written by Sergey Armensky (idea of Andrey Vytnov?)
- Plain Java (new method added for each property)
- Will be soon in production
- Have nothing to do with Scala

JAXB plugin

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JAXB plugin Pros

- Pure Java

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- Pure Java
- Simple and clean

JAXB plugin Pros

- Pure Java
- Simple and clean
- Simplify some code

JAXB plugin Cons

- Only for JAXB generated classes

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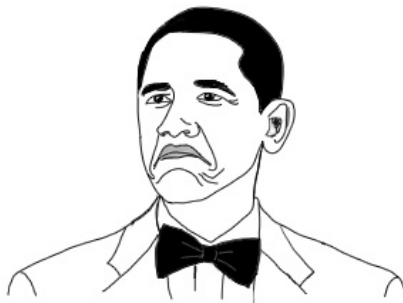
JAXB plugin Cons

- Only for JAXB generated classes
- Simplify only some code
- Not declarative enough

JAXB plugin Cons

- Only for JAXB generated classes
- Simplify only some code
- Not declarative enough
- Not mapper at all

JAXB Plugin



NOT BAD

Can we do better?

Can we do better?



CHALLENGE ACCEPTED

Scala related features

- Implicits of all kinds
- Point-free style
- Scala virtualized
- Macros

Yajom

- Yet Another Java Object Mapper
- Based on implicits and Scala macros
- All reflection is done in compile-time
- Easy to configure, extend or derive
(having no clue about Scala Macros at all)

Yajom

Talk is cheap. Show me the code.

Yajom Pros

- Scala

Yajom Pros

- Scala
- Compile-time bulletproof

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- IDE support

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- Works with any classes without any changes

Yajom Pros

- Scala
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- IDE support
- Works with any classes without any changes
- No problem with debugging

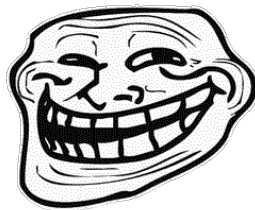
- Scala

Yajom Cons

- Scala
- Maybe not mature enough

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Yajom



<https://github.com/gark87/yajom>

Thank You!